

# Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



## Spring Cavefish

*Chologaster agassizi*

**Common name** • Spring Cavefish

**Scientific name** • *Chologaster agassizi*

**State status** • Endangered

### Ecology

Spring cavefish have a localized distribution from southern Illinois southward to central Tennessee and into southeastern Missouri. They inhabit caves, springs, spring runs and spring seeps throughout their range, but they are currently found in only one site in Missouri. Spring cavefish usually stay underground after dawn but emerge into surface waters at dusk. They use their underdeveloped eyes to distinguish between light and darkness. These fish are specialists in their diet, feeding mainly on three species of amphipods (genus *Gammarus*). Spawning likely occurs underground between January and April. Adult spring cavefish typically reach a length of 1.8-2.6 inches.

### Reasons for Decline

Cave streams and springs are affected by the activities on the surface of the ground. Any activity that reduces water quality or quantity affects cavefish. Although there is no evidence to suggest that spring cavefish were ever more common than they currently are, they are vulnerable to pollution from cropfields, pastures, septic tanks, sewage lagoons, chemical spills, urban runoff, toxic metal from mines, and livestock and poultry waste. In addition, activities that alter the water table, such as wells and quarries, affect cavefish habitat.

### Specific Recommendations

Species like the spring cavefish are indicators of clean, healthy aquatic systems. Their presence suggests that the underground water supply is likely contaminant free. Following these recommendations will avoid or minimize impacts to cave systems and the spring cavefish.

→ Minimize sedimentation and chemical or nutrient-laden runoff into streams, sinkholes, caves and springs by implementing and monitoring erosion and sediment controls for the duration of the project.

→ Establish and maintain forested buffers 100 foot wide along streams and around sinkhole and cave entrances.

→ Take care to contain all construction debris to prevent its accidental introduction into caves, sinkholes or springs as a result of clean-up activities, run-off, flooding, wind or other natural forces.

→ Dispose of chemicals, toxic waste, garbage and wash water from trucks in areas designated for such wastes. These sites should be away from caves and sinkholes.

→ If temporary roadways must be built, ensure that roadways are of low gradient with sufficient roadbed and storm water runoff drains and outlets.

### General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers, Management Recommendations for Construction Projects Affecting Missouri Wetlands and Management Recommendations for Construction Projects Affecting Missouri Karst Habitat.

### Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

Missouri Department of Conservation  
Policy Coordination Section  
P.O. Box 180  
2901 W. Truman Blvd  
Jefferson City, MO 65102-0180  
Telephone: 573/751-4115

Missouri Department of Natural Resources  
Division of Environmental Quality  
P.O. Box 176  
Jefferson City, MO 65102-0176  
Telephone: 573/526-3315

U.S. Army Corps of Engineers  
Regulatory Branch  
700 Federal Building  
Kansas City, MO 64106-2896  
Telephone: 816/983-3990

U.S. Environmental Protection Agency  
Water, Wetlands, and Pesticides Division  
901 North 5th Street  
Kansas City, KS 66101  
Telephone: 913/551-7307

U.S. Fish and Wildlife Service  
Ecological Services Field Office  
608 E. Cherry Street, Room 200  
Columbia, MO 65201  
Telephone: 573/876-1911

## **Disclaimer**

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.